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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/583,721

10/01/2007

Steffen Schmalz

SCHM3013/JJC/PMB

6607

23364 7590 02/16/2011

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ALEXANDRIA, VA 22314-1176

EXAMINER

BITAR, NANCY

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

02/16/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/583,721	Applicant(s) SCHMALZ ET AL.	
	Examiner NANCY BITAR	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's response to the last Office Action, filed 9/02/2010, has been entered and made of record.
2. Claims 1-3; 5-7 are currently pending.
3. Applicants' arguments filed 12/02/2010 with respect to the rejection(s) of claim(s) 1-3; 5-7 under 103(a) have been fully considered but they are not persuasive.
4. Applicant argues that Jones fails to teach that the additional comparative data relates to NEW types of forgeries which are not recognized based on the comparative data derived from authentic bank notes and known forgeries in order to detect counterfeit bank notes and that these forgeries cannot be considered to be additional comparative data for new types of forgeries. Moreover, applicant argues that Murata relates to the concept that it is desirable to prevent copiers from creating duplicate images of bank notes that are in existence as well as authentic documents that are newly issued after the copier is manufactured and that the copier has a registration mode in which info regarding newly issued authentic bills/securities can be registered in the copier and stored in the registration characteristic storage. Thus, the Murata publication fails to disclose the use of additional comparative data relating to NEW types of forgeries.

In response, the Examiner refers to Jones, et al. figure 3a Part 245 "Does bill pass other counterfeit test" for instance, currency which is considered a new type of forgeries which was not stored yet if a new forgeries was identified according to the currency than it will be added to the stored image memory as a new type of counterfeit. When a new currency bill is scanned, the

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controller 150 compares the serial number of the scanned currency bill against any serial numbers stored in the memory 160. If a match is found, the controller 150 may send a signal to the operator control panel 170 to indicate that a suspected counterfeit bill has been found. In one embodiment, the bill suspected to be counterfeit may be flagged. In some embodiments, a number of data can be used to assess whether a bill is a suspect bill, including serial number, denomination, series, issuing bank, image quality, infrared characteristics, ultraviolet characteristics, color shifting ink, watermarks, metallic threads, holograms, etc., or some combination thereof. Jones et al also teaches that step 280 may be done before the serial number is extracted at step 220. Also contemplated is an embodiment in which the images of suspect counterfeit bills are not stored in the memory. In that embodiment, the process would move directly from step 270 to step 282 (paragraph [0073]). Thus when new types of forgeries which are not recognized based on the comparative data are scanned the system will update the memory with the new additional data. (paragraph [0113]; see also figure 15, example H). Jones teaches the comparison data for forgeries that are obtained from comparison data for new forgeries (paragraph [0183-0185]). Examiner used a secondary reference Murata et al teaches an image forming device provided with a reading section characterized by comprising the following which reads an object image as data, and an image formation part which forms a picture in the paper from image data. A feature extraction part which extracts the feature of a picture from read image data.

A registration characteristic storage section which registers the feature extracted from image data which read a specific object image. Murata clearly teaches a prohibition part which forbids image formation according to this comparison result as compared with the feature of a

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specific object image that the feature of an object image is registered (see figures 1 and 3, paragraph [0006-008] and abstract). Murata publication compares a document to be copied against information to existing authentic bills and well as new issued authentic bills. It would have been obvious to one of ordinary skill in the art to use the know comparative data and the newly issued authentication bills in order to check processed bank notes thus formation of duplicate image during issuing of new bank notes, is prohibited and hence forgery prohibition function of image forming device is improved, reliably. Pernot et al (EP 1255232) teaches the acceptance of bank notes by authenticity checking machine in all possible positions of the banknotes (see paragraph [0050-0051]). All remaining arguments are reliant on the aforementioned and addressed arguments and thus are considered to be wholly addressed herein.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3,5- 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (US 2003/0132281) in view of Murata et al (JP 2001-157044)

As to claims 1-3, Jones et al teaches the method for recognizing forged bank notes with a bank note processing machine comprising the steps, processing the bank note with the bank note

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processing machine; checking the bank notes with comparative data stored by the bank note

processing machine and (see applicant admitted preamble, specification paragraph [0004]) ,

using additional comparative data for new types of forgeries ,which are not recognized based on the comparative data derived from authentic bank notes and known forgeries (figure 15; paragraph [093] and paragraph [0127])

wherein the bank notes to be checked are compared with both the comparative data and the additional comparative data for new types of forgeries so as to determine whether a forged bank note is present (see figure 16; adapted to receive a plurality of currency bills

and an image scanner adapted to obtain an image of a currency bill and to extract a serial number from the image of the currency bill. An authentication and discrimination unit is also included to perform counterfeit testing on the currency bill. Coupled to the input receptacle is a transport mechanism adapted to transport each of the currency bills one at a time from the input

receptacle past the image scanner and the authentication and discrimination unit to at least one output receptacle. A memory storage is adapted to store the obtained image of each of the

currency bills. The memory is also adapted to store at least one serial number of counterfeit

currency bills. A controller is adapted to update the memory with a serial number of a currency

bill determined to be counterfeit by the authentication and discrimination unit, paragraph [0183-

0185]. While Jones meets a number of the limitations of the claimed invention, as pointed out

more fully above, Jones fails to specifically teach “provide the comparative data derived from

authentic bank notes and known forgeries and the additional comparative data for new types of

forgeries that may have arisen after the comparative data derived from authentic bank notes and

known forgeries was established. Murata et al teaches an image forming device provided with a

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reading section characterized by comprising the following which reads an object image as data, and an image formation part which forms a picture in the paper from image data. A feature extraction part which extracts the feature of a picture from read image data. A registration characteristic storage section which registers the feature extracted from image data which read a specific object image. Murata clearly teaches a prohibition part which forbids image formation according to this comparison result as compared with the feature of a specific object image that the feature of an object image is registered (see figures 1 and 3, paragraph [0006-008] and abstract).

It would have been obvious to one of ordinary skill in the art to use the known comparative data and the newly issued authentication bills in order to check processed bank notes thus formation of duplicate image during issuing of new bank notes, is prohibited and hence forgery prohibition function of image forming device is improved, reliably. Therefore, the claimed invention would have been obvious to one of ordinary skill in the art at the time of the invention by applicant.

As to claim 5, Jones et al teaches the method according to claim 1, wherein the additional comparative data (serial numbers, paragraph [0183]) for new types of forgeries are derived and produced from the new type of forgery after the first occurrence of the new type of forgery (paragraph [0183-0185]) ; see also paragraph [0127-0129]).

7. Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (US 2003/0132281) in view of Murata et al (JP 2001-157044) and further in view of Pernot et al (EP 1255232).

While Jones and Murata et al does not meet a number of the limitations of the claimed invention, as pointed out more fully above, Neither Jones nor Murata specifically teach the comparative data and additional comparative data for new types of forgeries are available for each possible position of the bank notes. Specifically, Pernot et al. teaches the four different positions of introducing the bank note where the acceptance of banknote by authenticity checking machines in all possible positions of the banknote (paragraph [0051]). It would have been obvious to one of ordinary skill in the art to authenticate the bank note in different position in order the new type of forgery can be affected independently of the respective position thus enhancing the recognition of new types of forgeries in order to increase the authenticity of bank notes. Therefore, the claimed invention would have been obvious to one of ordinary skill in the art at the time of the invention by applicant.

Claims 6-7 differ from claim 1-3 only in that claim 1-3 are method claims whereas claim 6-7 are an apparatus claim. Thus, claims 6-7 are analyzed as previously discussed with respect to claims above.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NANCY BITAR whose telephone number is (571)270-1041. The examiner can normally be reached on Mon-Fri (7:30a.m. to 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on 571-272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DANIEL G MARIAM/
Primary Examiner, Art Unit 2624

/Nancy Bitar/
Examiner, Art Unit 2624